Energy

BUSINESS PLAN 2009-12

ACCOUNTABILITY STATEMENT

The business plan for the three years commencing April 1, 2009 was prepared under my direction in accordance with the *Government Accountability Act* and the government's accounting policies. All of the government's policy decisions as of March 12, 2009 with material economic or fiscal implications of which I am aware have been considered in preparing the business plan.

The Ministry's priorities outlined in the business plan were developed in the context of the government's business and fiscal plans. I am committed to achieving the planned results laid out in this business plan.

Mel Knight, *Minister of Energy*
March 20, 2009

THE MINISTRY

The Ministry of Energy consists of the Department of Energy (the Department), the Energy Resources Conservation Board (ERCB or the Board) and the Alberta Utilities Commission (AUC or the Commission). The Minister is also accountable for the Alberta Petroleum Marketing Commission (APMC) which is included in the Department's consolidated financial statements for reporting purposes.

The past, present and future of Alberta's energy industry is firmly based upon the development of the province's non-renewable resources including coal, minerals, natural gas, petrochemicals, conventional oil and oil sands. This portfolio is supplemented by the promising emergence of a renewable energy sector, which includes wind, bio-energy, solar and hydro generated electricity. The responsible development of the province's energy resources, with a commitment to the environment and the economic benefits that development provides to Albertans, is central to the Department of Energy's mandate. The Department is also engaged in promoting energy efficiency and conservation by both Albertans and industry.

The effective and responsible management of energy resources, including granting industry the right to explore for and develop, is a central business function of the Department. This business is conducted in the context of the government's overall commitment to balance economic growth and

environmental responsibility. The Department is also responsible for establishing, administering and monitoring the effectiveness of fiscal and royalty systems, which provide appropriate returns for Albertans as owners of the oil and gas resources, while at the same time encouraging additional investment that creates jobs and economic prosperity.

The APMC accepts delivery of the Crown's royalty share of conventional crude oil and sells it at current market value. Unlike other energy commodities, conventional crude oil royalties are paid with "in-kind" products which are sold in the market. The APMC's operations are fully integrated within the Department and funded by the Crown.

The ERCB is an agency of the Government of Alberta with responsibility to regulate Alberta's energy resource sector. While the ERCB reports to the Minister of Energy, it makes its formal decisions independently in accordance with relevant statutes and regulations. It establishes and applies technical standards for the safe and reliable operation of energy facilities while having regard for social, economic and environmental effects, including resource conservation.

The AUC is an agency of the Government of Alberta that ensures the delivery of Alberta's utility services takes place in a manner that is fair, responsible, and in the public interest. The AUC regulates investor owned electric, natural gas and water utilities, as well as some municipally owned electric utilities, to ensure Albertans receive safe and reliable utility service at reasonable rates. The AUC is responsible for making timely decisions on the siting of major natural gas and electricity transmission facilities, as well as power plants. The AUC also makes rules relating to the operation of the retail natural gas and electricity markets, and adjudicates on market and operational rule contraventions that the Market Surveillance Administrator may bring before the AUC. While the Minister of Energy is responsible for the AUC, it makes formal decisions independently in accordance with relevant statutes and regulations.

VISION

Alberta is a global energy leader, recognized as a responsible world-class energy supplier, an energy technology champion, a sophisticated energy consumer and a solid global environmental citizen.

MISSION

Assure sustained prosperity in the interests of Albertans through the responsible development of energy and mineral resources, and leadership in energy technology, conservation and efficiency.

The recently released *Provincial Energy Strategy* outlines this vision and charts a course that builds on our strengths, addresses our challenges and pursues a strategic approach. The ultimate time horizon commanded by this strategy is long-term, but over each horizon we will plot a steadfast course towards key outcomes. Three desired outcomes are critical to realizing our vision: clean energy production, wise energy use, and sustained economic prosperity. As policy makers and regulators take the necessary actions to meet these goals, Alberta will follow a path of sustainable prosperity which will allow us to play a significant, proactive role in our own future and demonstrate leadership by exerting our full influence on the world stage.

LINK TO THE GOVERNMENT OF ALBERTA STRATEGIC BUSINESS PLAN

The Ministry of Energy is committed to the *Government of Alberta Strategic Business Plan*. The key linkages and contributions of the Ministry to the Government of Alberta goals and Government Priorities are highlighted below:

Goal 1: Alberta will have a prosperous economy.
Alberta can take a number of steps to derive greater wealth over the long-term and in a more sustainable way through its energy industry. The Ministry will support optimizing the recovery of our energy resources, developing our substantial unconventional gas, reaching our oil sands potential, broadening the markets for our energy resources, exporting our energy knowledge, and taking our commodities further along the value chain than we currently do.

Goal 3: The high quality of Alberta's environment will be sustained.
The Ministry will work with stakeholders to manage the cumulative environmental effects of development, facilitate renewable and alternative sources of energy, and help advance technological innovations such as carbon capture and storage, that enhance environmentally sustainable energy development.

Goal 4: Alberta will have a financially stable, open and accountable government and maintain its strong position nationally and internationally.
The Ministry assesses and collects resource revenue from the development of Alberta's energy and mineral resources. In 2007-08 non-renewable resource revenue accounted for about 30 per cent of the provincial government's total revenue. The Ministry has implemented a new Royalty Framework for Alberta, and the contribution of the energy and mineral sectors to provincial revenue will continue to support the provision of priority programs and services on which Albertans depend.

Goal 10: Alberta will have effective and efficient transportation infrastructure.
The Ministry will develop and implement policies to ensure sufficient and reliable pipeline and electric transmission facilities are available in a timely manner to support continued economic growth in the province.

Government of Alberta Priorities
Alberta Energy is leading work on the government priority to *ensure Alberta's energy resources are developed in an environmentally sustainable way* and will work with other ministries to *enhance value-added activity, increase innovation, and build a skilled workforce to improve the long-run sustainability of Alberta's economy.*

SIGNIFICANT OPPORTUNITIES AND CHALLENGES

Opportunities:

Alberta's Energy Supply – The Western Canada Sedimentary Basin's deposits of oil, gas, oil sands and coal make it one of the most concentrated sources of fossil fuels in the world. Alberta has inherited the primary benefits of this basin and the related obligations of its stewardship. Alberta also has extensive wind, solar and bio-energy resources. Developing these renewable resources will help in reducing greenhouse gas emissions, enhance Alberta's diversity of energy supply, stimulate regional activity, and fortify collaboration across industry sectors. An additional – and very real – category of potential energy supply that must be mentioned is saved energy through greater industrial and consumer efficiency and conservation.

Value Added – Refining and upgrading raw energy resources, as well as further petrochemical processing to produce a diversity of higher-value products can greatly expand work and business opportunities for Albertans. Alberta has a unique opportunity to develop leading industrial and petrochemical upgrading and refining clusters based on transforming raw feedstocks into synthetic gas and gas liquids for petrochemical development. At the same time we can capture and store carbon emissions and produce electricity for the provincial grid. Alberta can also tap more of what we currently leave in the ground (e.g. enhanced oil recovery), develop our substantial unconventional gas (coalbed methane, shale gas, tight sands), and reach more of our oil sands resource potential.

Research and Innovation – A renewed, focused and consolidated emphasis on energy research and deployment is crucial to unlocking the full potential of Alberta's energy resources. A coordinated, one-window approach with the support of industry capital and guidance will drive clean energy solutions. The oil sands hold enormous potential, but will require new technologies to achieve their full production potential and minimize their environmental footprint. New technologies will also expand and transition the use of Alberta's abundant coal resources to low emission/clean power generation, coal gasification and industrial feed stocks.

Carbon Capture and Storage (CCS) – CCS in its ultimate role, is an enabler of clean gasification processes and is a key technology component to realizing the commercial viability of clean fossil fuels. The Western Canada Sedimentary Basin is also one of the world's most attractive sites for storing carbon emissions. Ultimately, Alberta's expertise in the science of solutions will be valued and an exportable resource unto itself.

Challenges:

Energy Prices and Resource Revenues – Alberta's energy sector has been – and is expected to remain – the central enabler of our prosperity. Current Government of Alberta forecasts indicate energy revenues declining from 2008-09 levels due to the effects of the world-wide recession and the credit crunch on commodity prices and industry activity levels.

Oil Sands Development – Alberta's oil sands represent the second largest oil reserves in the world. They are a focal point in Alberta, across Canada and around the world for demonstrating our ability to deliver on environmentally responsible development. Expansion of environmental legislation (particularly the adoption of low carbon fuel standards) in other North American jurisdictions could affect markets for Alberta's bitumen and synthetic crude oil from the oil sands. Alberta's challenge is to develop the oil sands while facilitating sustainable prosperity and reducing the environmental footprint.

Electricity Generation and Transmission Capacity – Electricity is a facilitator of economic development in Alberta. Continued growth of generation and transmission capacity is important. To this end a robust, reliable and efficient electricity transmission system is required. Transmission infrastructure is a public good that must be available in advance of need, to enable addition of new generation and be capable of meeting long-term load growth throughout the province. Improving electricity infrastructure will also lay the foundation for greener energy, lower-cost electricity, greater potential for renewable energy sources and future economic growth that supports consumer products that are more fuel and energy efficient.

Capacity and Expertise – The Ministry faces strong competition from the energy industry when recruiting and retaining skilled employees. The energy business is complex and knowledge intensive, requiring specialized expertise and skills. Ministry employees typically develop skills that are attractive to industry. In recent years, the Ministry has experienced increased turnover and greater difficulty in finding technical and professional people with the required skills and knowledge to maintain technical competency and fulfill our mandate.

STRATEGIC PRIORITIES 2009-12

Through the Ministry's review of external and internal challenges, the strategic priorities described below have been identified. These are in addition to ongoing core activities of the Ministry.

GREENING OUR GROWTH

1. **Provincial Energy Strategy** Implement the vision in the *Provincial Energy Strategy*.

   Linkage:
   Goals 3, 4, 5, 6, 7, 8 and 9

2.	**Carbon Capture and Storage** **Linkage: Goal 3**	Implement carbon capture and storage research, and initiate large-scale demonstration projects through the Carbon Capture and Storage initiative.
3.	**Oil sands research** **Linkage: Goal 8**	Support research on new oil sands extraction processes that use less energy, less water, reduce tailings ponds, improve land reclamation and support the Oil Sands Strategic Plan.
4.	**Regulatory framework** **Linkage: Goal 10**	Review the regulatory framework for energy activities in Alberta to ensure efficient and streamlined delivery of provincial resource and environmental management strategies.

CREATING AND PROTECTING OUR OPPORTUNITIES

5.	**International energy relations** **Linkage: Goals 3 and 5**	Promote increased international awareness of Alberta as a global energy supplier, an energy technology champion, a sophisticated energy consumer and a solid global environmental citizen. Ensure Alberta energy products continue to have access to markets.
6.	**Upgrading and refining capacity** **Linkage: Goal 4**	Implement strategies to increase upgrading and refining capacity in Alberta, including the implementation of Bitumen Royalty In-Kind.
7.	**Electricity transmission** **Linkage: Goals 7, 9 and 10**	Develop and implement policies to ensure sufficient and reliable electric transmission facilities are available in a timely manner to support continued economic growth in the province.
8.	**Organization and staff capacity** **Linkage: Goal 11**	Implement human resource development and workforce planning strategies to retain, attract and develop our employees to ensure a competent and committed workforce that meets current and future needs.

CORE BUSINESSES, GOALS, STRATEGIES & PERFORMANCE MEASURES

Core Business One: Assuring energy supply and benefits from energy and mineral resource development for Albertans

Alberta benefits from a wealth of Crown-owned natural resources, but relies on the private sector to develop these resources. In return the Department of Energy receives revenues in the form of royalties, bonus bids, offset compensation and annual rental fees. It calculates, assesses and collects these revenues and freehold mineral tax and monitors and reviews the effectiveness of Alberta's royalty framework. The Department, in conjunction with other Government of Alberta ministries, recommends resource development policy which support government goals. The Department assures that Albertans receive benefits from the development of its resources and that these resources are developed in an environmentally sustainable manner. To ensure effective use and conservation of energy and mineral resources the Ministry also encourages industrial integration and increased value-added resource upgrading in Alberta. The goals under this core business support the outcomes of sustained economic prosperity and clean energy production outlined in the *Provincial Energy Strategy*.

GOAL ONE 1 Alberta has a competitive and effective royalty system, incenting development and maximizing benefits to Albertans

What it means

Revenue from Alberta's energy resources are used by the Government of Alberta to fund key programs that benefit all Albertans. Alberta will sustain a royalty regime which attracts industry investment, creating economic activity and jobs. It also ensures that the government, as the resource owner, receives an appropriate share of revenues from the development of these resources. The government recognizes that a strong energy sector provides not only royalties for Albertans, but also jobs, business opportunities and tax revenue.

Strategies

1.1 The Department will continue to monitor the effectiveness and competitiveness of Alberta's royalty regime in light of changing economic circumstances.

1.2 Alberta's royalty regime will continue to support Government of Alberta economic and resource development outcomes.

1.3 In 2009-10 the Department will implement a three-point incentive program which includes a drilling royalty credit, new well incentive program and $30 million investment in abandoning and reclaiming old well sites by the Orphan Well Association. The Department will monitor the impact of the incentive program, and at the end of the 2009-10 year, assess whether it is necessary or appropriate for it to be continued.

Performance Measures	Last Actual (year)	Target 2009-10	Target 2010-11	Target 2011-12
1a. **Sharing the Revenue from Resource Development:** Crown Revenue Share	This measure is under review by the Department. Changes will reflect Alberta's new royalty framework			

GOAL TWO 2 Ensure all energy and mineral resource revenues, that the Government of Alberta is entitled to, are accurately calculated, collected and reported

What it means

Alberta will receive all revenues owed to it from the development of Alberta's energy and mineral resources. Ministry of Energy's business processes, systems and controls should result in accurate calculation, assessment and collection of all amounts that can and should be collected. In 2007-08 non-renewable resource revenue accounted for $11 billion dollars or approximately 30 per cent of the Government of Alberta's total revenue.

Strategies

2.1 Improve assurance of the completeness and accuracy of well and production data and continue to provide clear communication to industry with regard to filing information and accurate reporting to reduce the number of amendments and audit adjustments.

2.2 Continue to maintain and enhance the Ministry's information technology systems and infrastructure that are critical to supporting resource revenue assessment and collection processes.

Performance Measures	Last Actual 2007-08	Target 2009-10	Target 2010-11	Target 2011-12
2a. **Revenue collection: defaults on resource payments owed to the Government of Alberta:** Energy revenues owed to the government, which are not recoverable[1]	$ 0	More than 99.99% of all revenues owed are collected[1]		
2b. **Audit adjustments to industry filing and reporting:** Absolute adjustments as a percentage of Department resource revenue (three-year moving average)[2]	1.5%	Less than 2.0%	Less than 2.0%	Less than 2.0%

Performance Measure Under Development:
Accuracy of royalty information, calculations and reporting (based on volumetric information, calculation and reporting of royalties, and industry filing).

Notes:

1 The measure considers only those debts, which cannot be collected, and which therefore have to be written off as losses. The Department has procedures in place for recovering unpaid debts, however, revenues owed to the Government of Alberta may not be recovered in certain cases (for example, due to a debtor's bankruptcy). The Department has processes in place to manage these risks.

2 The measure is based on all adjustments made which reflect total error rates. The average annual absolute dollar value of all adjustments arising from audits completed or processed for the three years ending March 31, 2008 was $160.1 million. The average annual net dollar value of net adjustments for the same period was $39.8 million in the Crown's favour.

Source:
Alberta Department of Energy

GOAL THREE 3

Ensure energy and mineral resource development occurs in a responsible, environmentally sustainable manner and achieves the Government of Alberta's outcomes

What it means

The Ministry works within the province's existing policy framework to improve energy production practices in Alberta, encouraging clean energy production and continued industry investment in future energy development from non-renewable and renewable sources. The Ministry addresses emerging energy and mineral trends in a responsible manner that protects the environment and public safety while integrating broader considerations of social, economic, resource, environmental and cumulative effects.

Strategies

3.1 The Ministry of Energy will work with other government ministries and major stakeholders to implement the *Provincial Energy Strategy* and the long-term strategic plan for oil sands development, *Responsible Actions: A Plan for Alberta's Oil Sands*.

3.2 Complete consultation and policy recommendations for nuclear energy development in Alberta.

3.3 Explore and promote opportunities for additional hydroelectric generation and remove barriers to the development of additional wind generation in Alberta.

3.4 Work with other ministries and stakeholders to implement the provincial action plan on climate change and the recommendations from the Carbon Capture and Storage Development Council, in particular the implementation of carbon capture and storage research and demonstration projects.

3.5 Work with other ministries on implementing the provincial *Land-use Framework*, *Water for Life: Alberta's Strategy for Sustainability*, cumulative effects management, biodiversity strategy, species at risk recovery plans, rural development and access management planning initiatives.

3.6 Participate with other ministries in implementing Alberta's First Nations consultation guidelines and work with Aboriginal communities and resource developers to create opportunities for Aboriginal people to participate in Alberta's energy economy.

3.7 Work with other ministries to ensure that appropriate policies or regulatory refinements are incorporated to facilitate the development of unconventional gas resources, including coalbed methane, shale gas, and tight gas, in an environmentally and responsible manner.

3.8 Ensure the policy infrastructure supporting optimized, continued productivity and sustainable development of conventional oil is reviewed and enhanced, if necessary, to reflect the mature basin context of Alberta. As part of this, the Department will complete a review of Enhanced Oil Recovery policy as part of a Mature Oilfield Review.

Performance Measures	Last Actual (year)	Target 2009-10	Target 2010-11	Target 2011-12
3.a **Carbon Capture and Storage:** Report annual capture and injection of carbon in Alberta[1]	n/a (2008)	5 Megatonnes by 2015		
3.b **Upstream Oil and Gas Industry Investment:** Upstream industry investment in Alberta - Annual capital expenditure in Alberta on exploration and development of oil, oil sands and gas resources[2] ($ billions)	37.7 (2007)	23 to 30 (2009)	23 to 30 (2010)	23 to 30 (2011)

Notes:

1 Data presently being collated by the ERCB.

2 The results do not include bonuses from the sale of mineral rights. Alberta remains Canada's top location for upstream oil and gas industry investment (exploration and development). Overall, in 2007, total industry investment in Alberta accounted for about 81 per cent of Canada's total oil and gas industry spending of $46.8 billion.

Sources:

3.a Energy Resources Conservation Board

3.b Statistics Canada's Private and Public Investment (PPI) publication

GOAL FOUR 4 The Ministry and its partners have the required policies and programs to encourage value-added development in Alberta

What it means

Alberta can achieve significant benefits by encouraging energy resources be upgraded further along the value chain into higher value commodities and products. Alberta has a world-class petrochemical industry based mainly on ethane from conventional natural gas resources. The oil sands provide considerable potential for new refining capacity, for petrochemical feedstocks from upgrader off-gases and for a broader range of petrochemicals based on petroleum. These new opportunities, when combined with Alberta's natural gas liquid based petrochemical industry, create significant potential for more value-added development in Alberta.

Strategies

4.1 Develop a strategy to increase upgrading and refining capacity in Alberta, including taking bitumen as royalty in-kind to be upgraded in Alberta.

4.2 Work with other ministries to promote and market Alberta's energy resource development and value-added opportunities to secure new investment, market growth, employment and business opportunities.

4.3 Work with other ministries to assess the value of additional pipeline capacity to reach and expand markets including industry development of greater pipeline capacity to the west coast of Canada for offshore delivery of oil and products.

4.4 Facilitate the development and utilization of alternative energy resources such as biofuels and waste to energy opportunities.

Performance Measures	Last Actual (year)	Target 2009-10	Target 2010-11	Target 2011-12
4a. **Ethane Demand in Alberta** – in barrels per day[1]	244,000 (2007)	60,000 - 85,000 additional barrels of ethane per day over next 5 years		
4b. **Ethanol Production in Alberta** – millions of litres[2] **based on projected Alberta gasoline consumption pool*	40 (2008)	40 (2009)	150 to 300 (2010)	150 to 300 (2011)
4c. **Biodiesel Production in Alberta** – millions of litres[2] **based on projected Alberta distillate consumption pool*	25 (2008)	25 (2009)	55 to 110 (2010)	55 to 110 (2011)

Notes:
1 Includes small volumes used for enhanced oil recovery.
2 Ethanol and biodiesel production is expected to remain the same, until new facilities become operational in 2010.

Sources:
4.a ERCB 2008 ST-98 (historical data) and Alberta Department of Energy (target)
4.b & c Alberta Department of Energy

Core Business Two: Leading and engaging citizens, communities, industry and governments to achieve effective stewardship of Alberta's energy resources

Energy efficiency and conservation will play a significant role in the future competitiveness of industry and attractiveness of the economic and social climate in Alberta. Effective and efficient development and consumption of Alberta's mineral and energy resources (non-renewable and renewable) is a shared responsibility of citizens, governments (Alberta provincial and municipal) and industries. Wise use of these resources requires sharing timely and credible information through effective communication and information systems, education and outreach programs, and sound regulatory frameworks. The goals under this core business support the outcome of wise energy use outlined in the *Provincial Energy Strategy*.

GOAL FIVE 5 Albertans are aware of and understand existing and emerging trends and opportunities relating to energy development and use in Alberta

What it means

Improved understanding, awareness and education about Alberta's energy resources and issues will be essential to responsible development and use of these resources. There is a need to provide Albertans, other Canadians and international audiences with information about how the province develops and uses energy, economic benefits, our environmental challenges and the environmental protection measures that are already in place or planned. Increased awareness and understanding of changing energy trends, new energy sources and issues related to the development of energy will also provide Albertans with a better basis on which to become involved in discussions around energy development and encourage them to seek careers in the energy sector.

Strategies

5.1 Enhance provincial, national and international understanding of Alberta's energy resources and work being done to develop these in an environmentally sustainable manner.

5.2 Review the effectiveness of current communications and public information in order to provide Albertans with easily accessible, relevant and high quality data, information, services, knowledge, and advice relative to the energy and utility sectors.

5.3 Proactively identify, communicate and address emerging issues that face energy and mineral development in Alberta.

5.4 Work within Alberta's education system to facilitate a flow of age-suitable information about the energy industry, its importance and its future.

5.5 Lead Alberta's strategic participation in regional, national and international energy initiatives, promoting energy trade, provincial participation in international energy discussions and negotiations, and improved access to international markets.

Performance Measure	Last Actual (year)	Target 2009-10	Target 2010-11	Target 2011-12
5.a **Survey of Alberta Public Awareness of Energy Issues**[1]	n/a (2008-09)	To follow once baseline survey completed in 2009-10		

Note:
1 Survey to be conducted in 2009-10.

GOAL SIX 6 Industry, citizens, and communities conserve and use energy wisely

What it means

Managing energy efficiency and conservation is one of the most effective mechanisms to address issues of rising energy costs, environmental impact and our competitive advantage. Investing in energy efficiency and adopting leading conservation practices will translate into producing goods and services with simply, less energy. Reducing the energy intensity per dollar of GDP has significant benefit to Albertans including: lower impacts on the environment, reduced costs to individual residents, improved industry competitiveness and enhanced economic development.

Strategies

6.1 Encourage the natural gas industry's utilization of best practices for fuel gas efficiency in upstream gas processing and work with industry to develop benchmarks for fuel gas use.

6.2 Support fuel efficiency audits for oil sands projects.

6.3 Alberta Energy will promote smart metering, smart grids and better consumption measurement in order to help Albertans better understand and adjust their electricity consumption patterns and incent greener practices.

6.4 Facilitate the reduction of energy intensity through gains in energy efficiency and demonstrated government leadership.

6.5 Support the development of an energy efficiency policy framework and provincial legislation.

Performance Measure Under Development:
Fuel Gas Efficiency: More efficient use of fuel gas by the energy industry with benchmarks to be established in 2009-10.

Core Business Three: Leading and supporting the development of energy related infrastructure, innovation, markets and regulatory systems

The Ministry works with its partners to ensure adequate infrastructure is developed and maintained to support existing and future energy and mineral development and access to markets. This includes 'hard' infrastructure such as electricity transmission lines, natural gas and oil pipelines, and carbon capture and storage facilities as well as 'soft' infrastructure and supporting systems such as research organizations and networks aimed at developing new technologies, and regulatory frameworks that ensure development takes place in a manner that is fair, responsible and in the public interest. The goals under this core business support the outcome of sustained economic prosperity outlined in the *Provincial Energy Strategy*.

GOAL SEVEN 7 Energy related infrastructure is built and sustained to support the Government of Alberta's objectives

What it means

Future economic prosperity will require energy infrastructure. Alberta's electricity system requires a robust, reliable and efficient transmission system to meet increasing demand. Natural gas and oil pipelines will be needed to access new markets and infrastructure will be needed to support carbon capture and storage. The Ministry will work with other ministries to encourage development of energy infrastructure and broader social/community infrastructure such as highways, railroads, hospitals and schools, particularly in support of energy development.

Strategies

7.1 Ensure Alberta's policy for transmission planning, rule-making and tariffs is implemented, and facilitate the development of new electricity infrastructure to ensure Albertans continue to receive safe, reliable and open-access service.

7.2 Minimize regulatory duplication arising from overlapping federal and provincial responsibilities.

7.3 Advocate for optimal tolls, tariffs and access to existing and new pipelines and wires that transport Alberta energy resources to North American and international markets.

7.4 Improve the policy and regulatory framework to encourage distributed electrical generation including micro-generation and mid-scale opportunities.

Performance Measures Under Development.

GOAL EIGHT 8 Ensure effective innovation policies and programs to achieve technology and processing improvements in the development of energy and mineral resources

What it means

Realizing our energy vision will depend on our concerted efforts to address the full curve of technology development, from conception to commercial deployment. This will include the development of new technologies or the enhanced deployment of already proven technologies. For example, technologies will help us realize large scale capture and use of carbon, reduce the use of natural gas and water, increase recovery, reduce costs, reduce emissions, and develop Alberta's

renewable energy sources. The Ministry will work with Advanced Education and Technology and other stakeholders to develop an integrated, coordinated approach which supports and encourages energy research by industry, government, universities and research organizations.

Strategies

8.1 Work with other ministries, research organizations and industry to develop an integrated, coordinated approach to research that supports environmentally sustainable energy development.

8.2 Support research on new oil sands extraction processes that use less energy, less water, reduce tailings ponds and improve land reclamation.

Performance Measure Under Development.

GOAL NINE 9 Alberta has a competitive and efficient energy system ensuring Albertans' electricity and natural gas needs are met

What it means

The Ministry establishes policy and market design for electricity wholesale and retail markets as well as retail market design for natural gas to assure an efficient, competitive marketplace that maintains reliable energy supplies and competitive prices to Alberta consumers. The Ministry is responsible for monitoring and oversight to ensure effective market operation.

Strategies

9.1 Develop recommendations to ensure the continuing effective operation of Alberta's electricity system to meet Alberta's growing needs.

9.2 Research, gather and publish metrics and tools to assess the performance of the electricity market.

9.3 Monitor the development and implementation of mandatory reliability standards for the North American transmission grid.

9.4 Harmonize the regulatory requirements for electricity and natural gas retail markets to ensure that a consistent set of rules apply to both.

9.5 Develop policy recommendations to support advanced metering technology development and use in the retail market.

9.6 Participate with government agencies and regulated electricity and natural gas retailers to provide consumers, industry and other government agencies with clear and timely communication to increase consumer understanding of Alberta's competitive marketplace for natural gas and electricity.

Performance Measure	Last Actual (year)	Target 2009-10	Target 2010-11	Target 2011-12
9a. **Power Generation:** Margin (MW) between supply and peak demand[1]	21% (2008)	Maintain a minimum 7% margin over peak load. (2009)	Maintain a minimum 7% margin over peak load. (2010)	Maintain a minimum 7% margin over peak load. (2011)

Note:

1 Wind power is not included as it is not dispatchable on a consistent basis. Tie line capacity is also not included.

Sources:
ERCB, Alberta Electric System Operator and Alberta Department of Energy

GOAL TEN 10

Regulation of energy and utility development in Alberta is fair, responsible and in the public interest

What it means

The Government of Alberta has established, in legislation and policy, a regulatory framework intended to ensure that the discovery, development and delivery of Alberta's energy resources and the development of Alberta's utility system take place in a manner that is fair, responsible and in the public interest. The oversight of this framework rests with the government, particularly the Minister of Energy, who is responsible for the related legislation. The Energy Resources Conservation Board (ERCB) and the Alberta Utilities Commission (AUC) are responsible for implementing their respective regulatory process within this framework. While these agencies report administratively to the Minister of Energy, their formal regulatory decisions are made independently, in accordance with the governing legislation and regulations.

The ERCB regulates the discovery, development and delivery of energy resources in Alberta. It establishes and applies technical standards for the safe and reliable operation of energy facilities while having regard for social, economic and environmental effects, including resource conservation. The ERCB conducts inspections to ensure compliance with the regulations it administers.

The AUC makes timely decisions on regulated utility rates and electricity and natural gas transmission and distribution facilities, which are needed to attract investment, meet future needs and ensure fair pricing. The AUC has rule-making responsibility relating to data communications transactions and the delivery of these transactions to market participants to ensure a well-functioning electricity and natural gas market.

Strategies

10.1 Work in partnership with Environment, Sustainable Resource Development and the ERCB to address upstream oil and gas sector policy gaps, overlaps and inconsistencies, and to complete detailed design and implementation of an integrated regulatory delivery system for the upstream oil and gas sector.

10.2 Maintain high standards of public safety, environmental protection and energy resource conservation by ensuring ERCB regulatory requirements are relevant, understood and complied with.

10.3 Improve the effectiveness and efficiency of ERCB decision making processes through improved use of Appropriate Dispute Resolution, expansion of routine decision processes for areas where the requirements are clear, and improved non-routine decision making processes used to settle conflict.

10.4 Continue to work with stakeholders to develop and refine sustainable liability management programs which ensure licensees are responsible for decommissioning and abandonment liabilities. (ERCB)

10.5 Improve processes for hearing transmission facility applications to ensure that they are conducted in a timely manner and provide appropriate opportunities for public input. (AUC)

Detailed Business Plans for the ERCB and AUC are available on their websites.

ERCB Performance Measure	Last Actual (year)	Target 2009-10	Target 2010-11	Target 2011-12
10.a **Protection of Public Safety** - Percentage of field inspections finding High Risk regulatory noncompliance	2.1% (2008)	Less than 3.5% (2009)	Less than 3.5% (2010)	Less than 3.5% (2011)

Note:
Performance measure under review.

Source:
Field Surveillance Inspection System database and Energy Resources Conservation Board waste plant spreadsheet

AUC Performance Measure	Last Actual (year)	Target 2009-10	Target 2010-11	Target 2011-12
10.b **Timeliness of the Needs and Facility Applications** - Percentage of needs and facility applications determined within 180 days of the application being deemed complete	n/a (2007-08)	100%	100%	100%

GOAL ELEVEN 11 Build an organizational environment for success

What it means

The Ministry recognizes the challenge and importance of maintaining and building organizational capacity to respond to changing business needs. Organizational capacity means having the right resources, people, finances, information, technology, processes and tools to deliver the Ministry's mission.

Strategies

11.1 Develop and implement human resource development and workforce planning strategies that enable the Ministry to retain, attract and develop our employees to ensure a competent and committed workforce that meets current and future needs. Develop strategies for succession planning, protection of information assets and corporate information and knowledge management and transfer.

11.2 Deliver human resource, financial management, information management, and technology business solutions that address emerging business needs and technology drivers in support of crucial business operations, and allow the retirement of aged business solutions.

Performance Measures	Last Actual (year)	Target 2009-10	Target 2010-11	Target 2011-12
11.a **Industry satisfaction**				
• with Department services	83% (2007)	n/a[1] (2009)	80% or higher (2010)	n/a[1] (2011)
• with Department electronic information management	90% (2007)	n/a[1] (2009)	80% or higher (2010)	n/a[1] (2011)
11b. **Work Environment:**				
Department:				
• Employee Engagement	76% (2008)	80% or higher (2009)	80% or higher (2010)	80% or higher (2011)
• Quality Work Environment	77% (2008)	80% or higher (2009)	80% or higher (2010)	80% or higher (2011)
ERCB:				
• Employee Engagement	81% (2008)	74% (2009)	75% or higher (2010)	75% or higher (2011)
• Quality Work Environment	80% (2008)	78% (2009)	78% or higher (2010)	78% or higher (2011)
AUC:				
• Employee Engagement	88% (2008)	74% (2009)	75% or higher (2010)	75% or higher (2011)
• Quality Work Environment	86% (2008)	78% (2009)	78% or higher (2010)	78% or higher (2011)

Note:
1 Surveys are conducted every second year.

Sources:
11.a Banister Research and Consulting
11.b Alberta Government Core Measures Survey conducted annually

EXPENSE BY CORE BUSINESS
(thousands of dollars)

	Comparable					
	2007-08 Actual	2008-09 Budget	2008-09 Forecast	2009-10 Estimate	2010-11 Target	2011-12 Target
Assuring energy supply and benefits from energy and mineral resource development for Albertans	90,921	126,579	126,319	192,614	394,271	424,291
Leading and engaging citizens, communities, industry and governments to achieve effective stewardship of Alberta's energy resources	33,800	33,800	33,800	33,800	33,800	33,800
Leading and supporting the development of energy related infrastructure, innovation, markets and regulatory systems	170,834	242,312	244,419	274,922	250,109	252,389
MINISTRY EXPENSE	295,555	402,691	404,538	501,336	678,180	710,480

MINISTRY STATEMENT OF OPERATIONS
(thousands of dollars)

	Comparable					
	2007-08 Actual	2008-09 Budget	2008-09 Forecast	2009-10 Estimate	2010-11 Target	2011-12 Target
REVENUE						
Non-Renewable Resource Revenue						
Natural Gas and By-Products Royalty	5,198,850	5,684,000	6,009,000	3,687,000	3,937,000	3,845,000
Crude Oil Royalty	1,654,801	1,601,000	1,706,000	1,249,000	1,489,000	1,655,000
Synthetic Crude Oil and Bitumen Royalty	2,913,102	3,402,000	3,229,000	1,008,000	1,784,000	2,554,000
Bonuses and Sales of Crown Leases	1,127,936	868,000	1,153,000	631,000	679,000	682,000
Rentals and Fees	158,748	140,000	158,000	143,000	136,000	128,000
Coal Royalty	13,965	14,000	34,000	27,000	26,000	28,000
Energy Industry Drilling Stimulus Program	-	-	-	(842,000)	(665,000)	-
Alberta Royalty Tax Credit	(43,658)	-	-	-	-	-
Total Non-Renewable Resource Revenue	11,023,744	11,709,000	12,289,000	5,903,000	7,386,000	8,892,000
Freehold Mineral Rights Tax	246,799	318,000	241,000	200,000	213,000	219,000
Investment Income	2,853	2,500	3,200	3,100	3,100	3,100
Industry Levies and Licences	90,552	140,400	140,400	145,743	150,933	151,219
Other Revenue	48,456	9,759	10,282	9,859	9,859	9,859
MINISTRY REVENUE	11,412,404	12,179,659	12,683,882	6,261,702	7,762,892	9,275,178
EXPENSE						
Program						
Ministry Support Services	2,204	2,134	2,134	2,195	2,235	2,235
Resource Development and Management	127,248	184,620	183,620	179,111	150,725	81,489
Energy Regulation	133,013	171,257	174,804	171,957	175,457	174,707
Utilities Regulation	18,861	31,645	30,945	35,038	36,728	39,014
Carbon Capture and Storage	-	-	-	100,000	300,000	400,000
Orphan Well Abandonment	13,566	13,000	13,000	13,000	13,000	13,000
Valuation Adjustments and Other Provisions	663	35	35	35	35	35
MINISTRY EXPENSE	295,555	402,691	404,538	501,336	678,180	710,480
Gain (Loss) on Disposal of Capital Assets	-	-	-	-	-	-
NET OPERATING RESULT	11,116,849	11,776,968	12,279,344	5,760,366	7,084,712	8,564,698

CONSOLIDATED NET OPERATING RESULT
(thousands of dollars)

	Comparable					
	2007-08 Actual	2008-09 Budget	2008-09 Forecast	2009-10 Estimate	2010-11 Target	2011-12 Target
Ministry Revenue	11,412,404	12,179,659	12,683,882	6,261,702	7,762,892	9,275,178
Inter-ministry consolidation adjustments	(2,516)	-	(2,025)	-	-	-
Consolidated Revenue	11,409,888	12,179,659	12,681,857	6,261,702	7,762,892	9,275,178
Ministry Expense	295,555	402,691	404,538	501,336	678,180	710,480
Inter-ministry consolidation adjustments	(2,516)	-	(2,025)	-	-	-
Consolidated Expense	**293,039**	**402,691**	**402,513**	**501,336**	**678,180**	**710,480**
Gain (Loss) on Disposal of Capital Assets	-	-	-	-	-	-
CONSOLIDATED NET OPERATING RESULT	11,116,849	11,776,968	12,279,344	5,760,366	7,084,712	8,564,698